

The Athenian Mercury:

Tuesday, November 24. 1691.

Quest. 1. **W**hat are the Royal Society now a doing, and what have they done for these several Years last past? and the Reason that we hear so little or nothing from 'em?

Ans. There's still a part of that Noble Society, who, if we are not misinform'd, do yet commonly meet at Gresham Collage according to their former Custom, tho' it's not at all difficult to guess at the Reasons why they may not have lately made so much noise in the World as they formerly did. One is, the Death not only of several of their Worthy Members, but even of their great Founder and Patron, in whose Fate they sympathiz'd, and have droop't ever since; — to which may be added, or indeed partly preceded, the Confusion in State by a parcel of Plots still Trumping up against one another for several Years, in order to make way for a Popish Design, which look't boldly abroad in the late Reign, which was too Religious in their way to mind much Learning, it being their known Maxim, *That Ignorance is the Mother of Devotion*, — but to that Heaven hath put a period. As for his present Majesty, (God preserve him to the Confusion of all his Enemies) when he came to the Throne, he found work cut out for his Sword for some Years, and is to be sure too busie to have yet leisure for the cultivation of the softer Arts of Peace in his Kingdom, which indeed never thrive well, unless bless'd with the Sunshine of Royal Favour. But when all those fatigues of War are over, we have no reason to doubt but hee'll agen recover the Reputation of the *English Learning*, which may have been of late somewhat Eclips'd, and give our Arts at home as much lustre as he has already our Arms abroad throughout all Europe: And then 'tis we may expect this *Royal Society of Worthies* like the *Phoenix*, arise out of their own Dust more lively and vigorous than ever. Nor in the mean time are they altogether silent, but some of their Worthy Members now and then give us a Specimen both of what they have been, and what yet may be expected from them, there being in the last Weeks *Thursdays Gazet* an account of two Books publish'd by two persons, who were the great Ornaments of that Society, the Ingenious Mr. E. and the Honourable Mr. Boyle, whom all the World admire, as Travellers sufficiently know, who is an *Academy* himself, and who alone, were there not another left, is an *Atlas* strong enough to support the Reputation of *Philosophy* in our *English World*.

Quest. 2. What is that defect in Nature which we vulgarly call Broken-Winded in a Horse, and whence does it proceed?

Ans. The late great Physician and Virtuoso Dr. Lower, made an Experiment on a Dog before the Royal Society, as we find in their Transactions, Vol. 2. page 544. which clearly solves this Question. He took the Dog, and after binding it according to Custom, cut the Nerves which on both sides of the Breast pass along the sides of the Pericardium towards the Diaphragme, on which it immediately fell a breathing like a wind-Broken Horse. Whence we may easily infer, that when a Horse is affected with that Disease, those Nerves are accidentally broken by hard straining, as they were separated on purpose in the Dog when the Doctor made the Experiment.

Quest. 3. What's the Reason that the Males of most sorts of Creatures, notwithstanding they are most vigorous, and otherwise shew the greatest Courage, yet never fight with, or beat the Females of their kind, tho' provoked to, but chuse rather to turn Tail and run away from 'em?

Ans. We ought indeed rather to have postponed this Question, as being fitter for the *Ladies Mercury*, than to come in here: However, since 't has stumbled in, let it e'ne take its chance here among the rest; accordingly we answer, that 'tis from that Natural Instinct planted in 'em by the Maker of the World, for the prefer-

vation of those several Species which he has placed therein; and what this Instinct is, and how it differs from Reason in men, we have formerly decided. The Difference of Sex among 'em it's true they partly know by their Senses, but their behaviour thereon they are taught by a higher principle, namely, that *Universal Reason* that guides them and all the World.

Quest. 4. Which is the greater Number, Even or Odd?

Ans. The two first Numbers are Two and Three, for a Unite is no more a Number than a Point Body, or a Moment Time: Now of these two first, which are even and odd, we need not tell the Gentleman which is the greater, and when hee'll assign the two last, wee'll satisfie him there too, which till he has done, we'll only tell him, that the last number he thinks on in a progressive motion is still the greatest, but whether 'tis even or odd, he himself must determine.

Quest. 5. What is the Nature of an Echo, and how may an Artificial one be made?

Ans. We think Mr. Cowley out of Pindar, defines it as well as any Philosopher of 'em all, when he calls it, *The Image of a Voice*. 'Tis indeed the repercussion, or reverberation of Sound; as that is only the Air in motion, which reflected, or refracted motion, if we may borrow a Term from another Sense, makes an Echo. If Sound has nothing to oppose it, it moves on circularly, still spreading wider and wider, tho' the outermost circles still weaker and worse defined, as in those made by a Stone flung into the water, which if check'd by a Bank or Island, flow back agen, and are a sort of Echoes to the first. But the thing may be yet plainer in the motion of a Ball, strike it forward, if there's nothing to oppose it, it proceeds as far as the *impres'd motion* lasts, if it meets with a Wall, it rebounds; and if there's a side-wall near it, and 'tis struck slantingly, to that agen, nay thence to a third behind the Striker, and quite opposite to that against which it first rebounded. To the making of an Echo, then (but let the Querist look to the propriety of the Expression) there's requir'd either several solid Objects, proportionably distances to receive, break and beat back the Sound, or a Concave, or perhaps both; and indeed we are inclin'd to believe both must concurr, where-ever there's an Echo. For if no solid Objects, the Voice is lost, if no Concave, 'tis not at least so strong and loud, that Form both receiving and beating back the undulating Air more equably than any other. Thus in Churches, especially our new ones, which are generally built after the Theatrical Form, we generally, or always find these Echoes, but seldom any that repeat more than once, there being only one great Wave equally beaten back: Whereas in Cloysters, or such old Buildings as have many Pillars or Butresses in their outside, the Sound is repeated over and over, being bandy'd from one to 'other, as well as reflected in general from the great Hollow within. Thus in one of the best Echoes we know in England, mention'd also as we remember, by Dr. Plac in his History of Oxford-shire, that in Woodstock Park, near the Brow of the Hill, not far from the old ruins: There are, its probable, vast hollows and caverns in the Bowels of the Hill, there are Buildings, Pillars or Walls also near it, by either or both of which the Echo may be form'd: So thus we have endeavour'd to describe the Nature of an Echo as clearly as we can, &c. If the Gentleman is willing to have an Artificial one, his readiest way is to build a Church, and his business is done.

Quest. 6. What's the Reason that I can blow either Hot or Cold out of my mouth, according as I hold my Lips closer or wider?

Ans. We deny that you, or any other can do so, and affirm, that 'tis only a vulgar Error, that the Air you blow from your mouth is both Hot and Cold, as

shall immediately appear to the Querist, and all the World. And here, First of all, tho' we really have as we have formerly acknowledg'd, a just veneration for the Memory of *Aristotle*, and think him a very great Man, yet as we doubt not but that he is mistaken in many other things, so we believe he is in the Nature of *Air*, and accordingly must take the Liberty to Dissent from him therein. In the combinations of the Qualities he makes *Air* most *Fluid* and *Hot*, whereas we believe it rather *Cold* than *Hot*, cou'd we find it unmix'd with other Bodies, or as other Philosophers now speak, divested from any *frigorifick* or *calorifick* particles, extraneous to its own Nature. This we think may be evinc'd from several Arguments. Where the *Air* is most unmix'd, namely, in the middle Region, its certainly cold, otherwise how shou'd Frosts and Snows be therein Generated, and why shou'd it still be the colder the higher Men go, on vast Mountains, and that even in the torrid Zone; nay, perhaps exactly under the Line, for we learn from experienc'd and credible Travellers, that not only the *Alps*, the *Pyrennees*, the *Appenine*, and *Ætna* it self, as well as *Atlas*, *Teneriff*, &c. but even the vast Mountains in the middle of *Africa*, in *Abyssinia*, and nearer the Cape (tho these too may for ought we know be only *Spurs of Atlas*) are covered with Eternal Snow, while there are nothing but Thunders, Lightnings, and intolerable suffocating Heats in the Plains beneath 'em. To omit other Arguments which may be taken from the sensible coolness of the *Air* even in the midst of the Summer, in the Evenings when the Rays of the Sun are a little dispers'd; and the something experimented, if we at any time beat the *Air* with the hollow of our Hand; we have thought an Experiment of the *Academy del Cimento* in Italy, not many years since Translated into our Language, does strongly confirm our Opinion. They tell us there, page 71, "That Hot water, as soon as the *Air* is extracted from it in the *Air-pump*, immediately falls a boiling. Now whence shou'd this be, unless that by the removal of the cold particles of the *Air*, those Fiery ones which had insinuated themselves into the *Liquor* were more at Liberty, by the absence of their Enemies, and fell to work to set the water in motion according to their own Nature. After this not unnecessary Dilquisition, we say that no Man can blow *Hot*, but only *Cold* out of his mouth, as to the *Air* which he expells thence, and which he suck't in for the cooling of what's within: But at the same time he blows out the *Air*, there rush out many particles of Heat together with it, which as they are more or less, are sooner or later before they separate from the cool *Air*, into whose Company they intruded. This is prov'd by an easie Experiment, Blow even with the Mouth contracted, as we do when wee'd cool a thing, and hold your Hand close to your Mouth, you'll find your Breath not Cold, as when at some distance, but sensibly warm, and colder and colder as you remove your Hand further off, tho' at but a little distance, because there cou'd muster out but a few of the warmer particles. Nay, cross the Cudgels, and breath with your mouth open, as we do to warm our Hands, tho' there are so many of the warmer Bodies, and so little more unmix'd *Air* goes out with 'em, yet you'll plainly find the further you hold your Hand from your mouth, the cooler that Breath will be, and if at some distance, more sensibly Cold than even what you breathed with the Mouth contracted, at its first Exit thence, the particles of Heat fling off by degrees, and being separated from these of the *Air*, which are *Heterogeneous* unto it.

Quest. 7. Would it not be a brave and generous Undertaking, and wou'd it not extremely oblige posterity, if the Authors of the *Athenian Mercury* wou'd undertake and prosecute the History of the Natural and Artificial Rarities of England, after the manner of the ingenious Dr. Platt upon *Staffordshire*, and might it not with more ease and expedition be effected by them than any others, by giving publick notice of their Method and Design of proceeding to the World, and then by inserting at the end of each Mercury Questions relating thereunto, and desiring Gentlemen and others to send in their own Observations, or what they know by undoubted Testimony concerning each Question: The Questions to be according to Discretion, or taken from those long since published for the same Design?

Ans. We think we know our selves better than the Querist does, and believe Dr. Platt wou'd not be very proud, if he shou'd chance to read his Name here together with ours. But tho' we highly approve the Design here mention'd, we are too sensible, *Quid valeant humeri*, hastily to set about a thing of that Nature, which requires both more Brains and Purse than we have to manage it, so as either to satisfy our selves or others. However, if the Querist will please to let us know what papers they are that he hints at, whether such Queries as are scatter'd here and there in the works of the *Royal Society*, or any printed single; and if such, where to be had, we'll in our next Volume make some Adventure that way, describing the Method wherein we intend to proceed in our Preface thereunto, and we hope what we shall there advance will prove very beneficial to the Learned World.

The small Bones that were sent us from near *Ludlow* in *Shropshire* are lost, the Querist is desired to send more, he is also desired to send us word, whether there have been any *Sculls* and *Ribs* found (and to send 'em with the rest) that have been proportionable to the other Bones.

The Gentleman afflicted in Body, will have his Answer in the twelve Numbers that compleat this Volume.

Many of the Nice Questions lately sent us about *Spirits*, &c. are treated of in the *Visions of the Soul*. Written by a Member of the *Athenian Society*.

That no unlearn'd or unthinking Persons may be seduced by an unwary reading of a late paper of the *Anabaptists*, which pretends to *Animadversions* upon our Paper of *Infant Baptism*, we shou'd by our next Saturdays paper fully confirm and prove what we have said, and answer all the weak and prejudic'd Objections that are made against *Infant Baptism*.

Advertisements.

The First, Second and Third Volumes of the *Athenian Mercury*, (resolving all the most Nice and Curious Questions propos'd by the Ingenious of either Sex) and the Supplements to 'em; (containing Extracts of the most considerable Books, newly Printed in England, and in the Foreign Journals) Printed for John Dunton at the Raven in the Poultry. Where are also to be had the Preface, Index and 12 Numbers alone, that compleat the first 18 Numbers of the 3d. Volume (in which 12 Numbers are resolved many of the Questions lately sent us) or single ones to this time.

The Proposals for the Young Students Library, are to be had at the Raven in the Poultry.

Naval Speculations, and Maritime Politicks: Being a Modest and Brief Discourse of the Royal Navy of England; of its Oeconomy and Government, and a Projection for an everlasting Seminary of Sea-men, by a Royal Maritime Hospital. With a Project for a Royal Fishery. Also Necessary Measures in the present War with France, &c. By Henry Maydman. London, Printed by W. Bonny, and sold by S. Manship at the Black-Bull in Cornhill, and J. Fisher at the Postern, between the two Tower-hills, and A. Feltbam at the Parliament-Stairs, and M. Gillyflower in Westminster-hall. 1691. Price 3 s. 6 d.

In Plow-yard, the third Door in *Grays-Inn-lane*, lives Dr. Thomas Kirlens, a Collegiate Physician, and Sworn Physician in Ordinary to King Charles the Second, until his death; who with a Drink and Pill (hindring no Business) undertakes to Cure any Ulcers, Sores, Swellings in the Nose, Face, or other parts; Scabs, Itch, Scurfs, Leprosies, and Venereal Disease, expecting nothing until the Cure be finished: Of the last he hath cured many hundreds in this City, many of them after fluxing, which carries the evil from the Lower Parts to the Head, and so destroys many. The Drink is 3 s. the Quart, the Pill 1 s. a Box, with Directions; a better Purger than which was never given, for they cleanse the Body of all Impurities, which are the causes of Dropsies, Gouts, Scurvies, Stone or Gravel, Pains in the Head, and other parts. With another Drink at 1 s. 6 d. a Quart. He cures all Fevers and hot Distempers without Bleeding, except in few Bodies. He gives his Opinion to all that writes or comes for nothing.